

Specifications	HP 8643A	HP 8644B	HP 8664A HP 8665A/B
Frequency Range: Resolution: Stability: Switching speed (typ.):	0.252 to 1030 MHz 0.252 to 2060 MHz (Opt 002) 0.01 Hz 5×10^{-10} /day (Opt 001) < 90 ms < 200 ms with FM on	0.252 to 1030 MHz 0.252 to 2060 MHz (Opt 002) 0.01 Hz 5×10^{-10} /day (Opt 001) < 350 ms	0.1 to 3000 MHz (HP 8664A) 0.1 to 4200 MHz (HP 8665A) 0.1 to 6000 MHz (HP 8665B) 0.01 Hz 5×10^{-10} /day (Opt. 001) < 100 ms
Spectral Purity SSB phase noise @ 1 GHz (20 kHz offset): Nonharmonics: (> 10 kHz offset) Harmonics: Subharmonics: Residual FM @ 1 GHz: 0.3 to 3 kHz post det. BW	- 130 dBc/Hz < - 100 dBc 0.252 to 1030 MHz < - 94 dBc 1030 to 2060 MHz < - 25 dBc, output \leq + 8 dBm None, 0.252 to 515 MHz < - 60 dBc, 515 to 1030 MHz < - 40 dBc, 1030 to 2060 MHz < 2 Hz rms	- 136 dBc/Hz < - 105 dBc 0.252 to 1030 MHz < - 100 dBc 1030 to 2060 MHz < - 25 dBc, output \leq + 10 dBm None, 0.252 to 515 MHz < - 60 dBc, 515 to 1030 MHz < - 40 dBc, 1030 to 2060 MHz < 1 Hz rms	- 117 dBc/Hz - 134 dBc/Hz (Opt 004) < - 100 dBc 187.5 to 2060 MHz < - 90 dBc 2060 to 6000 ¹ MHz, 0.1 to 187.5 MHz < - 30 dBc, output \leq + 10 dBm < - 75 dBc, 0.1 to 1500 MHz < - 40 dBc, 1500 to 3000 MHz < - 50 dBc, 3000 to 6000 ¹ MHz < 7.5 Hz rms < 1.2 Hz rms (Opt 004)
Output Level Range: Resolution: Absolute accuracy: Reverse power protection:	+ 13 to - 137 dBm 0.01 dB ± 1 dB, output \geq - 127 dBm 50 W	+ 16 to - 137 dBm, + 13 dBm (Opt 002) 0.01 dB ± 1 dB, output \geq - 127 dBm 50 W	+ 13 to - 139.9 dBm + 9 dBm (Opt 008) 0.01 dB ± 1 dB, \leq - 119.9 dBm, 1 to 1000 MHz ± 1.5 dB, output \leq - 119.9 dBm, 1000 to 3000 MHz ± 2 dB, output \leq - 119.9 dBm, > 3000 ¹ MHz, < 1 MHz 25 W ² , 0.1 to 2060 MHz 1 W, > 2060 ¹ MHz
Amplitude Modulation Depth: (@ \leq + 7 dBm) Resolution: Bandwidth (3 dB) \leq + 7 dBm: Accuracy: 1 kHz rate Distortion: 30% depth, 1 kHz rate	0 to 100% 0.1% dc to > 100 kHz, > 128 MHz \pm (7% of setting + 1%) up to 80% depth < 3%; < 4% (Opt 002)	0 to 100% 0.1% dc to > 100 kHz, > 128 MHz \pm (7% of setting + 1%) up to 80% depth < 3%; < 4% (Opt 002)	0 to 100% 0.1% > 10 kHz for > 10 MHz \pm (6% of setting + 1%) up to 90% depth < 4%
Frequency Modulation Maximum peak deviation: Resolution: Bandwidth (3 dB): Carrier accuracy in FM: Indicator accuracy: Distortion:	2 MHz, 1030 to 2060 MHz 1 MHz, 515 to 1030 MHz Deviation halves per lower octave 2.5% of setting dc to 100 kHz $\pm 0.5\%$ of setting < 5%, < 30 kHz rate < 10%, < 100 kHz rates < 5%, 20 Hz to 100 kHz rates	20 MHz/200 kHz ³ , > 1030 MHz 10 MHz/100 kHz ³ , > 515 MHz Deviation halves per lower octave 2.5% of setting dc to 100 kHz $\pm 0.5\%$ of setting < 5%, < 30 kHz rates < 10%, < 100 kHz rates < 5%, 20 Hz to 100 kHz rates	20 MHz, 3000 to 6000 ¹ MHz 10 MHz, 1500 to 3000 MHz Deviation halves per lower octave 2.5% of setting dc to 800 kHz $\pm 0.6\%$ of setting $\pm 9\%$, < 20 kHz rates < 1%, 20 Hz to 20 kHz rates

¹3000 MHz for HP 8664A, 4200 MHz for HP 8665A, 6000 MHz for HP 8665B

²N/A to HP 8665B

³Low-noise mode